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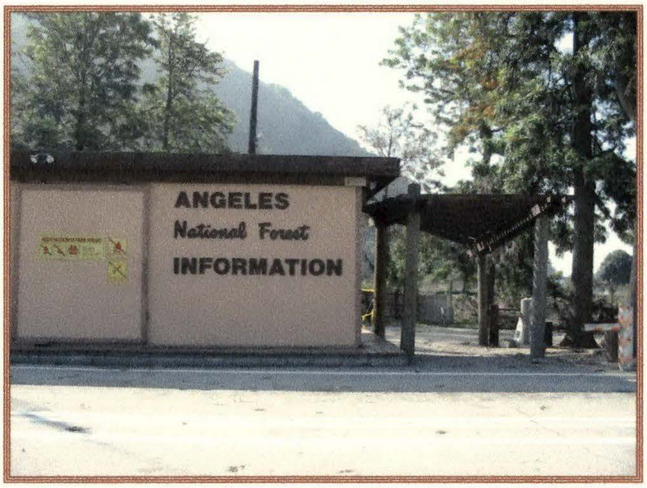
Getting the Forest Service's Message to All the People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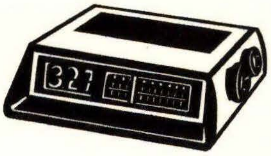

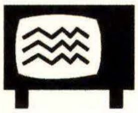

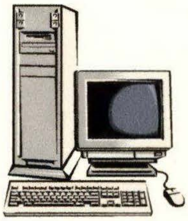

William Crano, Ph.D.
Claremont Graduate University

Ryan Quist, Ph.D.
Western University of Health Sciences

Patricia L. Winter, Ph.D.
Pacific Southwest Research Station, USDA Forest Service

Getting the Forest Service's Message to All the People

William Crano, Ph.D.[1]

Ryan Quist, Ph.D.[2]

Patricia L. Winter, Ph.D.[3]

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[1] Claremont Graduate University

[2] Western University of Health Sciences

[3] Pacific Southwest Research Station, USDA Forest Service, 4955 Canyon Crest Drive, Riverside, CA 92507; 951-680-1557.

Executive Summary

National Forests are important public resources. However, only segments of the population recreate on National Forest lands. Under representation among communities of color remains a concern. Just as there are myriad reasons for visiting National Forests, there are myriad reasons for not visiting. Among these reasons is the lack of information about outdoor recreational opportunities, reported more frequently as a barrier to visitation by people of color. In order to examine this further, a needs analysis approach was taken to routes of information used among African Americans, Latinos, Asians and Whites in the Los Angeles Metropolitan Area, a region known for its diversity.

In this report we provide the results of a telephone survey of 792 LA residents age 18 or older. We found significant differences in the number of hours per week that respondents were exposed to selected media by ethnic group. We also found significant differences in participation in church activities. We also found differences by ethnic group for the types of radio stations listened to and the types of magazines read most often. Sources of information for outdoor recreational opportunities also varied significantly for some source types. An examination of trust in information source showed that across all ethnic groups, family and friends and computers and the Internet were most frequently reported.

Participation in outdoor activities, and activities at National Forests were examined along with National Forest visitation. White respondents were most likely to have visited National Forests, African Americans least likely. While Latinos were less likely than Whites to visit National Forests, their participation in outdoor activities in locations other than forest lands was comparable to Whites.

Barriers to National Forest visitation are reported by ethnic group, with time constraints, lack of information, lack of interest, lack of transportation, health or physical limitations, no one to go with, distance, and lack of money were among those frequently cited. Variations by ethnic group are also reported.

Findings are of value in targeting the most effective communication routes for each group of interest, as well as providing some clues about the types of recreational opportunities groups may be interested in. Findings are also of use in offering routes to disseminating information to groups of color who might not visit forest lands, but whose interest in and appreciation of natural spaces can extend beyond recreational use.

* The authors thank the LA Basin respondents, the telephone interviewers at CGU, and Nancy Knap who assisted with the media analysis (PSW, USDA FS) for their roles in this study.

Getting the Forest Service's Message to All the People

National Forests are important resources for all citizens, but with minor exceptions, research suggests that visitors to the forests are drawn largely from the White majority (Outdoor Industry Association, 2004; Tierney, Dahl, & Chavez, 1998). Many reasons for the under representation of communities of color among forest visitors have been offered, including varying motivations for taking trips and constraints experienced by diverse publics.

Motivations for taking vacations or day trips differ by ethnicity. For example, Tierney and others (1998) found that African Americans took vacations or daily excursions because they wanted to visit a safe place, to rest physically, or to challenge themselves. Latino respondents, conversely, vacationed or took day trips to be with family, to learn about a new culture or area, to develop new skills, to teach others, to maintain ties with their culture, or to meet new people.

Specific reasons for *not* visiting recreation areas based on ethnicity also have been found. Scott, Herrera, and Hunt (2004) revealed that people of color were more likely to avoid outdoor recreational facilities because of limitations on access to information, intrapersonal constraints (such as personality or in-group attitudes), and economic limitations (e.g., entry fees, cost and difficulty in arranging transport, etc). Interestingly, Scott and colleagues (2004) also found that the various ethnic groups they studied did *not* differ in terms of time commitments or interest in visiting forest areas.

However, among Asian and White respondents who did not visit recreation areas, Tierney and colleagues (1998) found time constraints to be a central issue. Latino respondents in Tierney and colleagues' study (1998) stated that they did not visit parks because there were too few Latino workers at the parks, or because they could not afford to do so. Their respondents stated that discrimination was a not reason for any ethnic group to avoid outdoor recreation, yet those who perceived even moderate levels of discrimination were 60% less likely to visit a natural area.

Similar to Scott and colleagues, Roberts (2003) found that a lack of awareness of outdoor recreation opportunities was a constraint to visitation among people of color. A lack of information on-site has also been reported as a constraint in outdoor recreation participation among ethnic minorities (Winter, Jeong and Godbey, 2004, Winter and McCollum, 2002).

This brief review of differing motivations and barriers related to outdoor recreation serves to demonstrate that there are likely myriad reasons for the imbalance of ethnic/racial groups recreating on Forest Service lands. (A more complete review of constraints and associated research can be found in Winter, in press). Of particular interest are barriers and constraints that are within the purview of the Forest Service, given its role in providing services and opportunities as a public land management agency.

The Forest Service mission, as set forth by law, is to achieve quality land management to meet the diverse needs of people (USDA Forest Service, 2004). The Forest Service is charged with serving *all* citizens of the U.S. Furthermore, the environmental justice mandate requires that it do so. However, as cited previously, equity in participation of all citizens does not characterize current usage trends. Clearly, this is an issue that should be considered and redressed if possible. The present research explores racial/ethnic variations in outdoor recreation, including communication related issues, in order to further our understanding of underlying factors of under participation. Research participants were drawn from the Los Angeles basin, known for its ethnic and racial diversity. Recommendations for Forest Service action are then offered based on our findings.

Media and Usage

One possible way to address the racial/ethnic imbalance in forest usage is through the use of the media. If the media can be used to persuade the citizenry that forested areas are a valued public resource, to be used by all, it might be possible to alleviate the earlier-noted racial and ethnic based variations in usage. This possibility raises a number of interesting questions: For example, if the media can be used in this ameliorative manner, it is important to know if the services offered by the Forest Service are adequately disseminated in minority or underserved communities. Further, are there better ways of making known to these communities the many resources and opportunities for recreation that are available in the National Forests? In short, can we do a better job of disseminating the Forest Service's message to a diverse public?

We believe that there are better ways of making opportunities known and getting the Forest Service message out. In this study we investigated ways that people of both majority and minority racial/ethnic status acquire information about the National Forests. Assuming differences in how this information is acquired, a second goal of the research was to determine the most optimal ways of reaching the underserved audience (or audiences). If racial/ethnic minority groups do not acquire information in the ways that citizens of majority status do, then supplying information via alternate channels may be the most optimal way of reaching these underserved groups.

How can important information be disseminated to underserved populations? This is a central issue, as the Forest Service is concerned with maximizing leisure/learning activities for all. In the United States, the government often has called upon the mass media to ameliorate important social problems or to publicize interventions taken to improve the public good. The current National Youth Anti-Drug Media Campaign is a case in point. Millions of dollars are being spent in this campaign in an attempt to attenuate drug usage among the nation's youth. Using mass media for this purpose may prove a risky strategy, however. Although mass media campaigns have at times been effective, for some topics (e.g., health promotion) (Atkin & Arkin, 1990; Brown & Walsch-Childers, 1994), the media sometimes are quite ineffective, resulting in large expenditures with no positive outcomes (Crano & Burgoon, 2002). It has been suggested that many intervention failures are the result of a misdiagnosis of need (Selnow & Crano, 1987). Policymakers sometimes misjudge the needs of those they are legitimately attempting to serve. In such circumstances, effects of ameliorative or information campaigns are largely dissipated because members of the client base do not interpret their needs in the same ways as the policymaker. An approach widely recommended (but not often used) to avoid such problems is a needs analysis, in which the felt needs of the directly affected community are assessed in as scientifically rigorous manner as possible (Crano & Brewer, 2002). Information derived from needs analysis allows programs to be designed (or disseminated), and such programs are almost invariably more successful than those programs that omit this step (Crano, 2003).

The needs analysis approach seems to be precisely what is required in the present context. We need to know how people from underserved ethnic/racial communities obtain information about recreational outlets, with special focus on the National Forests. Researchers have only begun to study cultural and ethnic differences in self-exposure and responsiveness to media sources (Selnow & Crano, 1987), however, and what little is known does not provide much comfort (Brodie, Kjellson, Hoff, & Parker, 1999; Crano & Burgoon, 2002; Dennis & Wartella, 1996; Hofstetter, Hovell, Myers, Blumberg, Sipan, & Yuasa, 1995; Wolitski, Bensley, Corby, Fishbein, & Galavotti, 1996). Recent research on acculturation and responsiveness to media (Dawson, Burgoon, & Crano, 2003; Dawson, Crano, & Burgoon, 1996) suggests that the most marginalized members of society are the *least* likely to profit from standard mass media social intervention programs. Why this is so is not clear, but it is reasonable to speculate that people of color may use very different sources of information (vis-à-vis Whites) when learning about social programs and interventions. To address this potential problem, the study presented in this report was designed specifically to assay the sources of information regarding recreational programs that people of color *do* use in guiding their actions.

The logic of our approach is straightforward. We do not believe that enhancing one's newspaper advertising budget to attract minorities will accomplish the sought-for goal if members of minority groups do not read newspapers – or do not read the newspaper in which the advertising appears. Lacking knowledge of the means by which information is most effectively and efficiently disseminated to underserved groups will almost always result in a waste of advertising money and, in the case of public service, in less than optimal delivery of the service.

Overview of the Research

How can we learn how people acquire information? Our approach involves surveying a large, randomly sampled group of people whom we pre-identified (with some degree of certainty) as being of White, Hispanic, Asian, or African American descent. On the basis of census tract information (and, in the case of the Hispanic subsample, surname), we developed an initial respondent sampling frame. Our aim was to obtain responses from 200 adults from each of the four ethnic groups noted here (a total of 800 respondents). These respondents would be questioned about their forest usage, and the sources of information they relied upon to learn about various opportunities available to them in the forests. In addition, information regarding race and ethnicity was requested, to ensure the accuracy of our categorization system.[4]

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[4] The initial categorization was meant as a first step. The more direct assessment is used to pinpoint respondents' ethnic categories.

The results of this survey allow an assessment of the strength of association between race/ethnicity, forest usage, and preferred (or most common) means of information acquisition about forest relevant opportunities. This information may provide useful guidance to the Forest Service in its attempts to reach the broader public. A more detailed discussion of the approach employed in this study follows.

Method

Participants

Participants were selected from a random quota sample of phone numbers in Los Angeles County, California. Ultimately, 195 Latino respondents, 200 African American respondents, 195 Asian respondents, and 202 White respondents participated in this research; all were residents of the diverse LA Metropolitan Area (Appendix A).[5]

The mean age of these respondents was 46.05 years ($\sigma = 20.37$). However, there were significant age differences between the four ethnic groups, $F_{(3, 787)} = 22.47$, $p<.001$. LSD Post Hoc analyses indicated that Latino ($M = 38.71$, $\sigma = 16.41$) and Asian ($M = 42.06$, $\sigma = 20.09$) respondents were significantly younger than African American ($M = 51.26$, $\sigma = 21.22$) and White ($M = 51.88$, $\sigma = 20.22$) respondents (all $p < .001$). Latino respondents did not differ significantly from Asian respondents, and African American respondents did not differ significantly from White respondents.

Interview

The full telephone interview protocol is included in Appendix B. Closed-ended questions were designed to assess media usage (Items 3, 5, 7), community involvement (Items 9, 11a), information sources regarding outdoor recreational opportunities (Items 14a-q), involvement in outdoor activities (Items 16, 17), National Forest visitation (Items 18, 18d), activities engaged in the National Forests (Item 18e), and outdoor recreational activities engaged in at locations other than National Forests (Items 20a-g).

Additional data were collected regarding respondents' immigrant status (Item 21a), their country of origin (Item 21b), primary language spoken at home (Item 22), primary language of reading materials at home (Item 23), and ethnic identity (Item 24).

Open-ended questions focused on television channel preferences (Item 4), radio station preferences (Item 6), newspapers/magazine preferences (Item 8), nature of community involvement (Items 10, 11b), most trusted source of information regarding outdoor recreational opportunities (Item 15), and reasons for not visiting the National Forests (Items18a, 19). In addition, prior to asking respondents about our prearranged list of possible sources of information regarding outdoor recreational activities, respondents were asked where they would usually obtain information (Item 12).

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[5] These respondents provided complete information in the interview.

Procedure

Participants were randomly selected from a marketing research database of phone numbers in Los Angeles County, California. The sampling strategy was designed to obtain representative samples of participants from four ethnic groups: Latino, African American, Asian, and White. A stratified random sample was not possible because ethnic information was not available from respondents prior to their interviews. Consequently, following a random selection of phone numbers, quotas were applied so that phone surveyors would inquire regarding a participant's ethnicity near the beginning of the call. Our goal was to obtain 200 participants from each of the four ethnic groups. The resulting sample consisted of 195 participants who identified themselves as being Latino, 195 participants who identified themselves belonging to groups of Asian ethnicity, 200 participants who identified themselves as African American, and 202 participants who identified themselves as White.[6]

The survey was translated into Spanish and Korean. If a non-Spanish speaking phone surveyor contacted a Spanish speaking potential respondent, the phone call was referred to a Spanish-speaking phone surveyor. A total of 73 surveys (37% of Latino respondents and 9% of total respondents) were conducted in Spanish. A Korean-speaking phone surveyor was available on an as-needed basis. However, it was not necessary to refer any calls for administering the survey in Korean.

A total of 21,196 randomly sampled phone numbers were dialed at least once in obtaining the sample of approximately 200 respondents per group. The most common reasons for an incomplete survey were no answer/answering machine/busy signal (9,136 phone numbers) and disconnected phone numbers (3,639 calls). Near the beginning of the study (after the first 3,783 phone calls), it was decided that the frequency of no answers, answering machines, and busy signals should be categorized separately (originally, all of these nonresponses were assembled into a single category). For the remaining 17,413 phone calls, no answer was most common (27% or 4,736 of the remaining calls), followed by answering machine (11% or 1,883 calls), and busy signals (2% or 350 calls).

A response rate was calculated including only phone calls that were eligible for surveying. This would exclude calls for which no one met ethnic or age (older than 18 years) eligibility requirements, and phone calls for which no one was home or available to participate in the survey. There were 3,678 calls that met the eligibility criteria during which an individual was invited to participate in the study. Of these, 792 individuals completed surveys. By this criterion, the response rate was 21.5%. Surveys only partially completed (51 calls) were considered non-response. Data from incomplete surveys were not used.

Results

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[6] Variations from the planned N (of 200) came about as a result of missing data or, in the case of White respondents, because of a minor miscount that resulted in data being collected on 2 more respondents than planned.

Media Usage and Involvement in Community

Comparing the four ethnic groups (Latino, African American, Asian, and White) on general media usage and involvement in community activities revealed significant differences in the number of hours per week that respondents watched television, *F*(3,785) = 5.86, *p* =. 001, listened to the radio, *F*(3,785) = 4.75, *p* = .003, and participated in church activities, *F*(3,785) = 5.34, *p* = .001 (*table 1*). Hours spent reading magazines or newspapers per week, and participation in community activities, did not vary significantly by ethnic group.

Table 1. Differences across ethnic groups in general media usage and involvement in community activities.

# of Hours Per Week Respondents	Latino	African American	Asian	White	ANOVA p level	Kruskall Wallis p level
Watch TV	16.34	20.03	13.05	16.70	.001	
Listen to the Radio	14.41	12.85	8.43	11.51	.003	
Read Magazines or Newspapers	5.40	6.82	7.02	7.68	.25	
Participate in Community Activities	2.19	5.54	5.10	4.36	.06	
Participate in Church Activities	1.51	4.07	1.76	1.97	.001	<.001

TV Viewing

African American respondents reported the greatest number of hours watching television (M = 20.03 hours/week, & = 1.17), Asian respondents reported the fewest hours of TV watching (M = 13.05, & = 1.19), and Latino (M = 16.34, & = 1.19) and White respondents' viewing times (M = 16.70, & = 1.17) fell between that of African American and Asian respondents.

Radio Listening

Latino respondents reported the greatest number of hours devoted to radio listening (*M* = 14.41 hours/week, & = 1.17), followed by African American respondents (*M* = 12.85, & =1.15) and White respondents (*M* = 11.51, & = 1.15). Asian respondents reported the least number of radio-listening hours (*M* = 8.43, & = 1.16).

The range and types of radio stations listened to varied by ethnic/racial group. Summarizing only those categories with 1 percent or more within each ethnic/racial group, Latinos were most likely to listen to ethnic radio stations, or those with R & B programming or rock (out of 304 reported stations, falling into 11 categories of programming; *fig. 1*). (For a complete list of the radio stations listened to by respondents see Appendix C. The source for types of programming, call letters, frequency, description of station and geographic location was www.shgresources.com/ca/radio.)

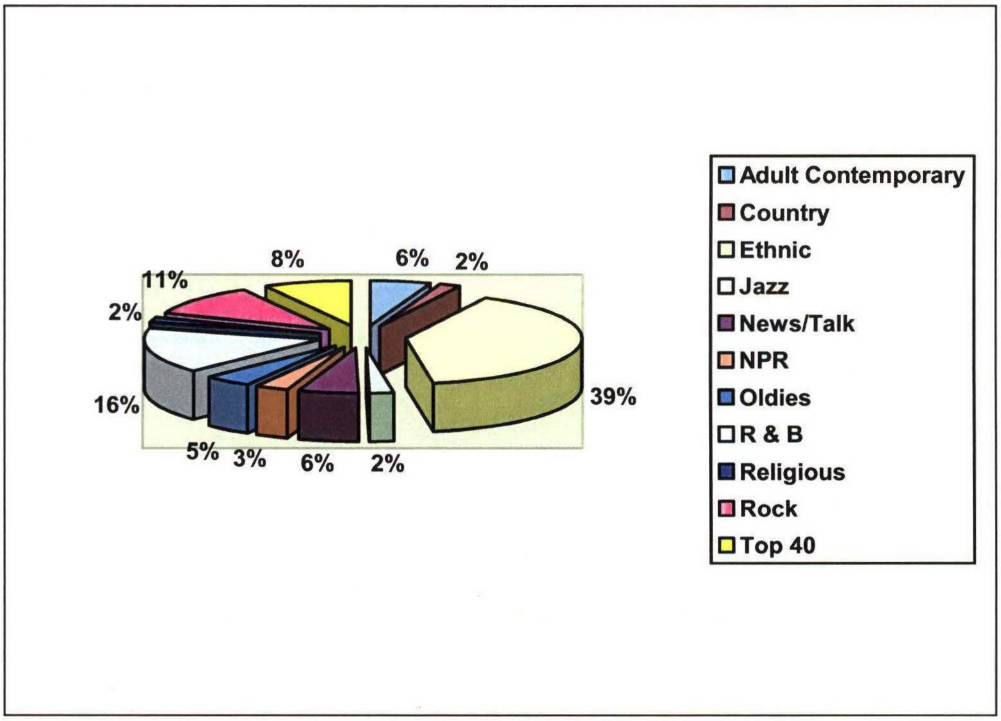

Figure 1. Radio Stations Listened to by Latinos

The majority of African American respondents reported listening to radio stations with R & B programming, jazz, or news/talk radio (*fig. 2*, based on 248 radio stations reported, falling into seven categories as shown).

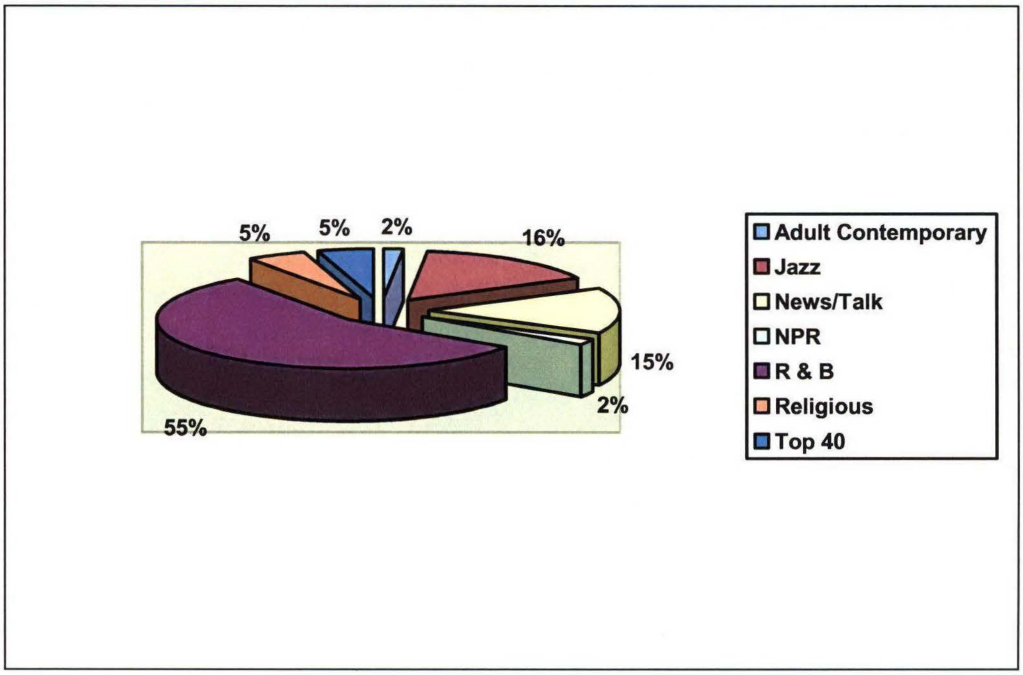

Figure 2. Radio Stations Listened to by African Americans

Asian respondents reported listening to news/talk, adult contemporary, top 40, R & B, or rock radio stations (based on 227 reported stations, falling into 12 categories; *fig. 3*).

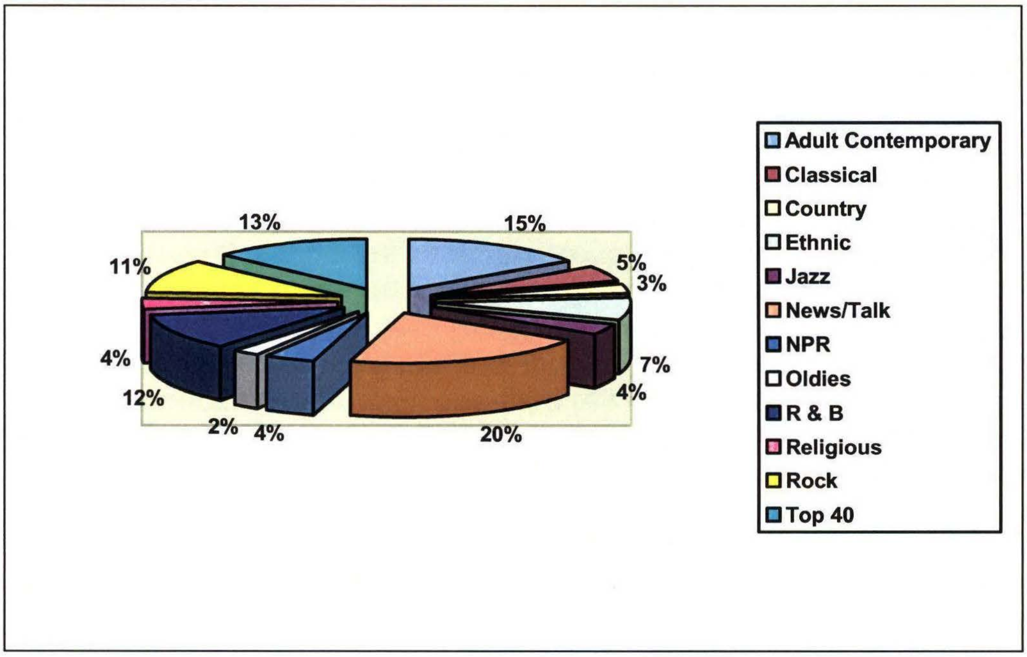

Figure 3. Radio Stations Listened to by Asians

White respondents reported listening to radio stations with news/talk, adult contemporary, and rock programming most often (based on 279 reported stations, falling into 11 categories; *fig. 4*).

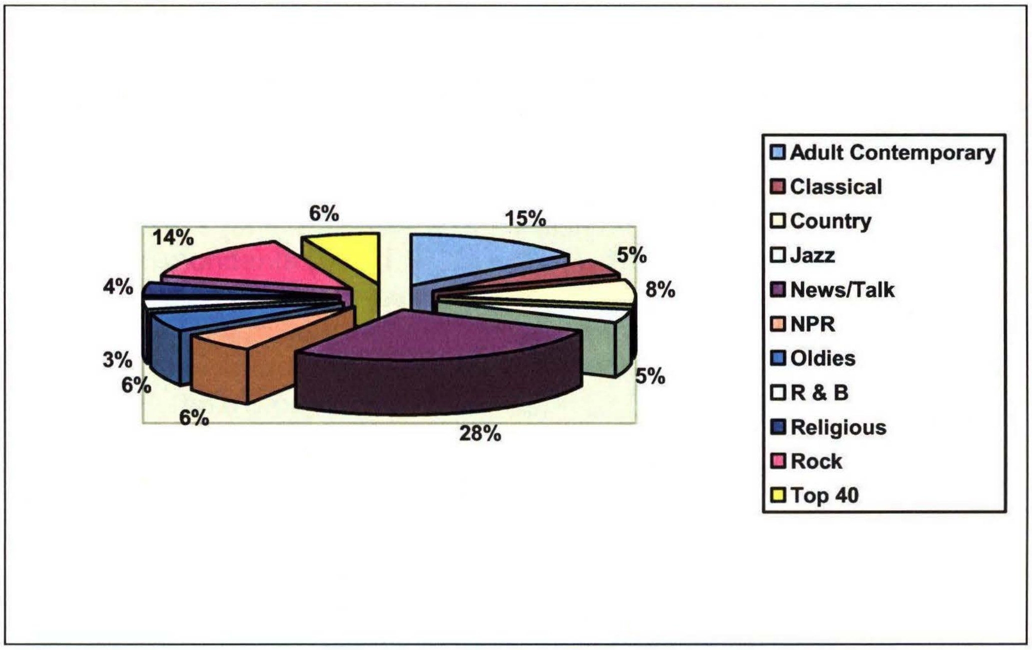

Figure 4. Radio Stations Listened to by Whites

Magazine/Newspaper Reading

There were no significant differences between ethnic groups regarding self-reported time spent reading magazines or newspapers, *F*(3,785) = 1.36, *p* = .25. The number of hours spent reading magazines or newspapers ranged between approximately five and eight hours per week.

Types of magazines read were diverse and numerous (Appendix D). However, the titles reported by ethnic group revealed that Latino and African American respondents read several magazines designed for an ethnically based audience. Among Latinos, approximately one-fifth (19.7%) of the magazines listed are designed for a Latino audience and many are in Spanish. Among African Americans, more than one-third (43.4%) of magazines mentioned are designed for an African American audience.

Newspapers respondents reported having read included a number of different titles, however the LA Times (63.3% of newspaper mentions), La Opinion (6.6% of newspaper mentions, 30.3% of Latino mentions), and the LA Daily News (6% of newspaper mentions) were the most frequently reported (Appendix E).

Involvement in Community Activities

There were marginally significant differences between the ethnic groups in terms of the amount of time each reported spending in general community activities, *F*(3,785) = 2.54, *p*=.055. The results indicate that Latino respondents reported spending less time in community activities (*M* = 2.19 hours/week, σ = 0.94) than African American respondents (*M* = 5.54, σ = 0.92), Asian respondents (*M* = 5.10, σ = 0.93), and White respondents (*M* = 4.36, σ = 0.92).

Involvement in Church Activities

African American respondents reported that they spent at least twice as much time in church activities (*M* = 4.07 hours/week, σ = 0.51) as Latino respondents (*M* = 1.51, σ = 0.52), Asian respondents (*M* = 1.76, σ = 0.51), and White respondents (*M* = 1.97, σ = 0.51). The variable representing the number of hours devoted to church activities was positively skewed (skew statistic = 10.18, standard error = 0.09) violating the assumptions of parametric tests. However, a nonparametric Kruskall Wallis test also indicated significant differences between the four ethnic groups, $\chi^2(3, N = 792) = 53.54$, *p* < .001.

Sources of Information for Outdoor Recreational Opportunities

Respondents indicated their preferred sources for outdoor recreation information (*table 2*). Because responses were measured on a four-point Likert scale, with response dimension ranging from "Never" (0) to "Very Frequently" (4), the resulting variables were ordinal in nature; consequently, parametric tests may not be appropriate. Table 2 presents significance levels for both parametric analysis of variance tests as well as the results of nonparametric Kruskall Wallis tests. Regardless of test, the pattern of results was consistent.

The results are generally consistent with the findings reported earlier on media usage and community involvement. For example, African American respondents reported that television was a more frequent source of information than did the other ethnic groups (*M* = 1.42, σ = .07), whereas Asian respondents reported that television was less frequently used as an information source than the other ethnic groups (*M* = 1.12, σ = .07). Latino respondents reported that radio was a more frequent source of information on outdoor recreational activities than the other groups (*M* = 1.29, σ = 0.07).

African American respondents reported that church and friends from church (respectively, *M* = 1.13, σ = .07 and *M* = 1.04, σ = .07) were more frequently used as sources of information than did the other ethnic groups.

Just as there were no significant differences between ethnic groups in terms of their involvement in general community activities (*p* = .25), there were no significant differences between groups in reliance for recreational information on community organizations (*p* = .14), neighbors (*p* = .54), or non-church friends (*p*= .21).

Other data regarding sources of information for outdoor recreational activities may facilitate understanding of general media usage. There were no significant differences between groups in the number of hours spent reading magazines or newspapers (*p* = .25). However, when asked about newspapers versus magazines separately, White respondents appeared to rely on newspapers for recreational information more frequently (*M* = 1.49, σ = .07) than did members of the other ethnic groups. There did not appear to be any significant differences between the groups in reliance on magazines for information (*p* = .13). There were no significant between-group differences on use of other reading materials (e.g., books and pamphlets, both p > .29).

Table 2. Ethnic differences in the frequency of obtaining information about outdoor recreational opportunities from different sources.

	Latino	African American	Asian	White	ANOVA p level	Kruskall Wallis p level
Television	1.39	1.42	1.12	1.25	.006	.004
Radio	1.29	1.19	0.91	0.99	<.001	<.001
Newspapers	1.15	1.21	1.24	1.49	.002	.003
Magazines	0.90	1.11	1.03	1.13	.075	.070
Billboards	0.68	0.75	0.50	0.61	.011	.035
Health Care Providers	0.52	0.89	0.48	0.53	.625	.769
Pamphlets	0.81	0.95	0.82	0.92	.303	.490
Books	0.71	0.91	0.88	0.90	.137	.086
Computers	1.10	1.04	1.62	1.25	<.001	<.001
Relatives	1.24	1.21	0.97	1.06	.009	.008
Church	0.71	1.13	0.56	0.63	<.001	<.001
Church Friends	0.65	1.04	0.57	0.71	<.001	<.001
Neighbors	0.83	0.88	0.83	0.80	.832	.864
Work	0.78	0.80	0.68	0.92	.052	.111
Other Friends	1.29	1.27	1.47	1.38	.111	.119
Community Organizations	0.68	0.88	0.68	0.79	.070	.221

While there were no significant differences between groups in terms of their dependence on neighbors (*p* = .54), work (*p* = .10), or health care providers (*p* = .77) as information sources, significant differences between groups were found for reliance on computers (*p* < .001), relatives (*p* = .009), and billboards (*p* = .02). Asian respondents reported more frequent reliance on computers (*M* = 1.62, σ = .08) than the other groups. Latino and African American respondents reported more reliance on relatives (*M* = 1.24, σ = .07 and *M* =1.21, σ = .07, respectively) than Asian and White respondents (*M* = .97, σ = .07 and *M* = 1.06, σ = .07, respectively). Finally, African American respondents also reported more frequent reliance on billboards (*M* = .75, σ = .06) than the other ethnic groups. However, reliance on billboards was quite low across all groups.

Within the ethnic groups, the most frequently reported source of information for both Latino and African American respondents was television. For Asian respondents, the most frequent source of information was computers, and for White respondents, the most frequent source of information was newspapers.

Respondents were also asked to report which information source they trusted the most for information about outdoor recreation. This question is a bit different in intent from reporting where information might be obtained from, and turns to the issue of respondents' impressions of the reliability of information obtained. For this item, the most trusted sources among Latinos were family and friends (24.5% of sources listed), computers/the internet (23.9%), tv (14.9%), and newspapers (14.4%). African Americans listed their most trusted sources as computers/the internet (22.2%), family and friends (19.0%), newspapers (11.3%), tv (6.7%), and radio (4.1%). The most trusted sources listed by Asian respondents were computers/the internet (27.8%), family and friends (15.9%), newspapers (8.2%), tv (4.6%), and magazines (4.6%). White respondents' most trusted sources of information about outdoor recreational opportunities included computers/the internet (25.8%), family and friends (21.8%), newspapers (18.4%), and tv (4.2%).

General Involvement in Outdoor Activities

Respondents were asked, "In the past 12 months, about how many times did you travel more than 30 miles for outdoor activities?" (Item17). The average response was 4.54 times, and the median response was 2 times. This variable violated the assumptions of normality, so a nonparametric median test was calculated for the purposes of significance testing. Each respondent was categorized as being either (1) above the median or (2) at or below the median. Then, a Chi-square test was conducted to test for significant differences between the four groups in terms of frequency of respondents falling above or below the median. This median test indicated significant differences between the four groups in their frequency of traveling for outdoor activities, $\chi^2(3,N=792) = 10.38$, $p = .02$. African American respondents traveled the least often for outdoor activities (36.5% above the median), followed by Latino respondents (41.0%) and Asian respondents (43.6%). White respondents reported the most travel for outdoor activities (52.0% were above the median).

Table 3 presents data regarding ethnic differences in involvement in various outdoor activities. Respondents were asked, "What are the three types of outdoor activities you participate in most often?" (Item 16). Responses were categorized based on the activities presented in Table 3. A Chi-square test of independence was used to test differences between groups. In some instances, an assumption of the Chi-square test was violated. Insufficiency of respondents in one or more of the groups participating in a particular activity was generally responsible for these violations. When the assumptions of the test were violated, results were not interpreted, and should be approached with caution.

There were significant differences among the groups in the frequency with which respondents indicated involvement in walking, $\chi^2(3,N=792)=50.03$, $p<.001$, and running, $\chi^2(3,N=792)=18.04$, $p<.001$. Latino and White respondents were significantly more likely than the other groups to nominate walking as a popular activity. More than 27% of the Latino sample, for example, revealed that walking was a popular activity for them. In addition, 13% of the Latino sample indicated that running was a popular activity, a proportion significantly greater than that observed among the other groups.

There also were significant ethnic group differences in involvement in baseball, $\chi^2(3,N=792) = 11.51$, $p = .009$, soccer, $\chi^2(3,N=792) = 44.85$, $p < .001$, and golf, $\chi^2(3,N=792) = 25.08$, $p < .001$. Latino respondents were more likely to report involvement in baseball and soccer than the other groups of respondents. Asian and White respondents were more likely to report involvement in golf than Latino and African American respondents. Notably, golf was the second most frequently cited outdoor activity in the Asian respondent sample.

Other significant differences observed between the four respondent groups were found in comparisons that involved freshwater fishing, $\chi^2(3,N=792) = 9.37$, $p = .025$, hiking, $\chi^2(3,N=792) = 18.24$, $p < .001$, camping, $\chi^2(3,N=792) = 8.56$, $p = .036$, picnicking, $\chi^2(3,N=792) = 9.39$, $p = .025$, and sightseeing, $\chi^2(3,N=792) = 11.50$, $p = .009$. Latino respondents were least likely of all the other groups to report involvement in freshwater fishing, but most likely to report involvement in picnicking.

Table 3. Ethnic differences in involvement in various outdoor activities.

	Latino	African American	Asian	White	Chi-Square p level
Walking	27%	12%	3%	20%	<.001
Running	13%	9%	3%	5%	<.001
Swimming	12%	10%	9%	8%	.708
Tennis	3%	3%	1%	5%	.288
Softball	8%	9%	13%	11%	.412
Baseball	6%	3%	1%	3%	.009
Basketball	6%	6%	4%	4%	.793
Volleyball	5%	3%	2%	2%	.171
Soccer	20%	4%	8%	3%	<.001
Football	2%	3%	4%	5%	.404
Golf	6%	5%	19%	14%	<.001
Street Biking	3%	2%	1%	3%	.687[a]
Mountain Biking	1%	1%	1%	2%	.413[a]
Downhill Skiing	2%	2%	1%	2%	.563[a]
Cross-country Skiing	0%	0%	1%	3%	.024[a]
Freshwater Fishing	1%	6%	7%	6%	.025
Saltwater Fishing	3%	3%	3%	5%	.563
Boating	1%	1%	2%	5%	.007[a]
Hunting	3%	3%	3%	4%	.818
Horseback Riding	3%	3%	1%	2%	.363[a]
Hiking	5%	2%	4%	10%	<.001
Backpacking	1%	0%	3%	4%	.021[a]
Camping	11%	6%	8%	14%	.036
Picnicking	10%	5%	3%	5%	.025
Sightseeing	6%	3%	1%	5%	.009
Off-road Driving	15%	19%	20%	15%	.491

[a] Violates assumptions of the Chi-Square test because the minimum expected value is less than 1 and/or more than 20% of the cells have an expected value less than 5.

White respondents were more likely to report that they had gone hiking, and both White and Latino respondents were more likely than the other groups to report that they had been camping. Regarding sightseeing, Latino respondents were most likely to report involvement (6%) followed by White respondents (5%) and African American respondents (3%). Asian respondents were least likely to report that they had been sightseeing (1%).

It may be useful to note other activities for which there were no significant differences between groups, but that were reported with some degree of frequency. Accordingly, an arbitrary cutoff point of 10% was applied in defining (three) other popular activities. Across the entire sample, an average of 17% of respondents reported involvement in off-road driving, 10% reported they had been swimming, and 10% had played softball. These activities were popular across all ethnic groups.

National Forest Visitation

It is important to note that there were significant differences regarding whether respondents from the various ethnic groups had visited the National Forests, $\chi^2(3,N=792) = 46.06$, $p < .001$. White respondents were most likely to have visited National Forests (77%), followed by Asians (59%), Latinos (48%), and African American (48%) respondents.

Those who had visited National Forests were asked, "In the last 12 months, approximately how many times did you visit the National Forest?" (Item 18d). The average response was 2.39, and the median response was 1 time in the last 12 months. Testing via the median test statistic indicated that there were significant differences between ethnic groups in response to this query, $\chi^2(3,N=258) = 7.46$, $p = .059$. Of those who had visited the National Forests, African American respondents traveled to the National Forest the least frequently (29.3% of respondents were above the median), followed by Latino respondents (35.5%). White respondents (49.1%) and Asian respondents (51.0%) reported the most frequent visits to the National Forests.

Those who had visited National Forests also were asked about their most common activities while they were at the National Forests, and their responses were categorized into the same list of activities presented in the previous section and summarized in Table 3. The results presented in Table 4 show slightly different patterns from those reported earlier. As before, results are only interpreted when the assumptions of the Chi-square test were met, to ensure that interpretations are based on an adequate number of responses.

In the previous (general outdoor involvement) section, there were no significant differences between ethnic groups regarding participation in softball or hunting. For those who visited National Forests, however, there were significant differences, as shown in Table 4. Asian respondents were most likely to have been involved in softball, and Latino respondents were least likely, $\chi^2(3,N=455) = 11.40$, $p = .01$. African American and Asian respondents were more likely to have been hunting than Latino and White respondents, $\chi^2(3,N=455) = 9.64$, $p = .022$.

For walking, $\chi^2(3,N=455) = 19.39$, $p < .001$, $\chi^2(3,N=455) = 19.53$, $p < .001$, picnicking, $\chi^2(3,N=455) = 22.20$, $p < .001$, and sightseeing, $\chi^2(3,N=455) = 18.24$,

$p < .001$, the patterns of results were consistent with the patterns described in the previous section on general involvement in outdoor activities. Otherwise, there were no significant differences in the reports of the other activities among the four groups.

Table 4. Ethnic differences in various outdoor activities at National Forests.

	Latino	African American	Asian	White	Chi-Square p level
Have you ever visited the National Forests?	140 (48%)	177 (48%)	191 (59%)	186 (77%)	<.001
Walking	18%	5%	2%	10%	<.001
Running	1%	0%	0%	0%	.272[a]
Swimming	5%	1%	0%	3%	.055[a]
Softball	9%	17%	25%	14%	.010
Baseball	1%	0%	1%	0%	.484[a]
Basketball	1%	0%	4%	1%	.110[a]
Volleyball	0%	0%	0%	0%	n/a
Soccer	7%	4%	8%	7%	.764
Football	0%	0%	0%	0%	n/a
Street Biking	1%	3%	1%	0%	.136[a]
Mountain Biking	2%	0%	0%	3%	.157[a]
Downhill Skiing	0%	0%	0%	4%	.008[a]
Cross-country Skiing	0%	1%	1%	4%	.089[a]
Freshwater Fishing	7%	10%	4%	10%	.276
Boating	0%	0%	2%	3%	.204[a]
Hunting	12%	23%	22%	12%	.022
Horseback Riding	2%	0%	0%	2%	.233[a]
Hiking	9%	3%	5%	18%	<.001
Backpacking	1%	1%	0%	2%	.514[a]
Camping	12%	5%	5%	10%	.214
Picnicking	16%	3%	1%	7%	<.001
Sightseeing	22%	9%	4%	10%	<.001
Off-road Driving	12%	17%	15%	8%	.194

[a] Violates assumptions of the Chi-Square test because the minimum expected value is less than 1 and/or more than 20% of the cells have an expected value less than 5.

Outdoor Activities in Places Other Than National Forests

Respondents were asked to consider a list of seven possible outdoor activities, and to indicate in which they had engaged, in places *other* than the National Forests. Table 5 summarizes these responses. There were significant differences in responses among the four ethnic groups for camping, $\chi^2(3,N=792) = 18.44$, $p < .001$, hiking, $\chi^2(3,N=792) = 38.70$, $p < .001$, water sports, $\chi^2(3,N=792) = 15.13$, $p = .002$, and snow sports, $\chi^2(3,N=792) = 21.22$, $p < .001$.

In comparison with Latino and African American respondents, White and Asian respondents were more likely to have been both camping and hiking in places other than National Forests. White respondents were most likely to have engaged in water sports (41%), and African American respondents the least likely (23%). Regarding snow sports, Asian respondents were most likely to report involvement in participation in places other than National Forests (25%); African American respondents were least likely (8%).

Table 5. Ethnic differences in the most common outdoor activities in places other than the National Forests.

	Latino	**African American**	**Asian**	**White**	**Chi-Square p level**
Camping	35%	27%	44%	46%	<.001
Hiking	34%	31%	48%	58%	<.001
Fishing	24%	26%	31%	34%	.100
Picnicking	67%	70%	58%	61%	.053
Biking	36%	25%	29%	31%	.156
Water Sports	33%	23%	31%	41%	.002
Snow Sports	16%	8%	25%	19%	<.001
1 or more	90%	82%	84%	85%	.097

Differences between groups in picnicking approached statistical significance, $\chi^2(3,N=792) = 7.68$, $p = .053$. In this comparison, Latino and African American respondent appear to be slightly more likely to report having gone picnicking in places other than National Forests than Asian and White respondents. Notably, among all four groups, picnicking was the most frequently reported activity: 64% of the entire sample reported picnicking in places other than the National Forests.

For both White and Asian respondents, the next most frequent activities after picnicking were hiking and camping. For African American respondents, camping, hiking, fishing, biking, and water sports occurred at a relatively high frequency. Among Latino respondents, camping, hiking, biking or engaging in water sports (in places other than National Forests) were popular pastimes.

As reported, there were significant differences between the ethnic groups in frequency of having previously visited the National Forests ($p <. 001$): White respondents (at a 77% response rate) were most likely to have visited National Forests, Latino (48%) and African American (48%) respondents the least likely. To establish whether respondents from the various groups were likely to utilize other outdoor resources at frequencies similar to their utilization of the National Forests, the final row of Table 5 presents the percentage of respondents who reported that they had engaged in one or more outdoor activities in locations other than the National Forests. First, it is noteworthy that there were no significant differences among the groups' responses, $\chi^2(3,N=792) = 6.32$, $p = .097$. In addition, although White respondents were most likely to have visited National Forests, Latino respondents were most likely to have engaged in at least one outdoor activity in places other than National Forests (90%, in comparison with 85% for White respondents). This result suggests that Latinos are not averse to outdoor activities; rather, they simply are less likely to go to the National Forests to engage in them.

Predictors of National Forest Visitation

The first set of variables analyzed as potential predictors of National Forest visitation were the media usage variables. Spearman's rho indicated that the time respondents spent watching television, $\rho = -.004$, $p = .92$, listening to the radio, $\rho = .04$, $p = .32$, or engaging in church activities, $\rho = -.02$, $p = .65$, were *not* significant predictors of National Forest use. However, time spent reading, $\rho = .15$, $p < .001$, and in pursuing general community activities, $\rho = .11$, $p = .002$ were both associated with a significantly greater likelihood of prior National Forest visitation.

Ethnic identification, or the extent to which respondents indicated that their self-reported ethnicity adequately described them, was a predictor of National Forest visitation for Latino respondents. This was not true for the other ethnic groups. Spearman's rho indicated that for Latino respondents, less ethnic identification predicted a greater likelihood of having visited the National Forests, $\rho = -.19$, $p = .009$. For African American respondents, $\rho = .01$, $p = .93$, Asian respondents, $\rho = .03$, $p = .73$, and White respondents, $\rho = -.06$, $p = .42$, there was no significant relationship between strength of ethnic identification and National Forest use.

Across all respondents, there was a significant relationship between National Forest visitation and the primary language spoken at home, $\chi^2(2,772) = 20.47$, $p < .001$, and the primary language of reading materials within the home, $\chi^2(2, N=772) = 9.54$, $p = .008$. Those who primarily spoke Spanish at home were the least likely to have visited a National Forest (38%), in comparison with those who primarily spoke English (62%) or any other language (56%). Likewise, respondents whose reading materials were written primarily in Spanish were less likely to have visited the National Forests (40%), in comparison to those with primarily English reading materials (59%) or reading materials primarily in any other language (63%).

Finally, there also was a significant difference between the number of years having lived outside the United States and National Forest visitation, $\rho = -0.08$, $p = .031$. Respondents who had lived more years outside of the United States were less likely to have visited National Forests.

Barriers to National Forest Visitation

Among respondents who had reported visiting National Forests, a variety of reasons were given for not visiting the forest more often. Barriers to more frequent visitation included time-related constraints (39.8% of the reasons listed, included either being too busy in general, or specific to family, work, or school responsibilities), a lack of interest (16.2%), health or physical limitations (9.5%), lack of transportation (7.2%), a lack of information about outdoor recreation opportunities (4%), distance to sites (4%), age (3.8%, discussed in terms of being too old to participate), a lack of money (3.8%), fear of something (2.3%, included fear of wild animals, getting lost, or being a victim of crime), no one to go with (2.0%), crowds (1.2%), and fire-related concerns (.6%, including closures due to fire risk, fear of fire, or recent burns and loss of places to recreate).

An examination of the top five reported barriers to visiting the National Forests more frequently contrasted responses of the four ethnic groups (*table 6*). Some variation by ethnic groups was revealed. More than half of the reasons listed by Latinos were time constraints, while only about one-fourth of the reasons given by African Americans were time-related. African Americans were most likely among the groups to mention a lack of interest, and were twice as likely as the other two groups of color to cite this reason. Health or physical limitations represented about one-tenth of the reasons provided by African Americans and Whites, about two-times as often as reported by Latinos or Asians.

Table 6. Top Five Barriers to National Forest Visitation by Ethnic Group

Rank	Latinos	African Americans	Asians	Whites
1st	time (52%)	time (26%)	time (47%)	time (37%)
2nd	transportation (10%)	lack of interest (26%)	lack of interest (13%)	lack of interest (17%)
3rd	lack of interest (8%)	health or physical limitation (14%)	too far (9.4%)	health or physical limitation (12%)
4th	lack of information/health or physical limitation (5%)	transportation (10%)	lack of information/health or physical limitation (6%)	lack of money (7%)
5th	lack of money (4%)	fears/age/lack of information (4%)	no one to go with (5%)	age (6%)

A lack of information was among the top five reasons among all three groups of color. Lack of money was among the top reasons given by Whites and Latinos.

African Americans and Whites cited age. Asians were the only group to list no one to go with among their top five. Fear related concerns were only among the top five reasons for African Americans. (The full account of barriers is provided in Appendix F).

Discussion

Using the National Forests

Findings offer many interesting and potentially useful insights for the natural resource manager interested in making the National Forests more available to the population at large, regardless of ethnic identification. The need for such insights was apparent in the results of the analysis of respondents' involvement in activities at the National Forests. These results, consistent with expectations based on earlier studies, revealed that White respondents were significantly more likely than the other groups to report having visited a National Forest in the past, whereas African Americans and Latinos were significantly less likely to have done so, and Asian respondents were intermediate to these groups. This same pattern was found in our analysis of the number of times in the past 12 months that respondents had traveled to the National Forests. Again, Whites were significantly more likely than African Americans to have visited the Forests; Asian and Latino respondents were intermediate to White and African American survey participants.

This pattern of greater White respondent participation in outdoor activities also was found in questions that queried general involvement in outdoor activities. In this more general query, Whites were found to be significantly more likely than African Americans to participate in outdoor recreational activities, with Asian and Latino respondents intermediate to these two groups.

Favored Outdoor Activities

When they did visit the National Forests, the activities in which respondents engaged were generally similar among the groups; however, some significant group differences emerged, and merit at least brief consideration. Whites and Latinos, for example, were significantly more likely than the other groups to engage in walking in the National Forests. Although Latinos were more likely than the other groups to play soccer and baseball (but not softball) in general, this was not found in their reports of activities in the National Forests.

Boating and hiking at the National Forests were more popular in the White subsample than in the other groups. Picnicking and sightseeing were more popular among Whites and Latinos than African American respondents, and Asian respondents expressed very little interest in either of these activities. These results may prove useful to those who wish to persuade individuals of particular ethnicities to make use of the National Forests. Emphasizing the activities that the present research has pinpointed allows a more targeted message, which may be specifically directed to enhance the participation rate of a specific underrepresented group. In conjunction with the media consumption and information dissemination information preferences uncovered, these results might prove very useful. They could help to pinpoint the specific activity to be emphasized, and the specific medium of communication to employ, to have the maximal effect on a specific ethnic group.

Media Consumption Patterns

In addition to differences in participation rates among the groups, and in the particular activities in which the members of these groups engaged when in the National Forests, this survey also assessed respondents' general media consumption patterns. As in earlier analyses, statistical assessment of media consumption patterns disclosed strong and statistically significant differences among the groups. In terms of general media usage, analysis suggested that African Americans spent significantly more time watching TV than the other groups; Asian respondents were least likely to do so. Latinos, on the other hand, reported significantly more exposure to radio than the other groups. Newspaper and magazine reading did not differ significantly among the groups.

The results of the present investigation suggest that television might be the most optimal means to reach African Americans when choosing among forms of media, whereas for Latinos, radio might prove a more optimal medium of mass information diffusion.

Differences also were found in time spent in both community and church activities. African American respondents invested significantly more time in church, and also were more likely than the other groups to engage in community activities. Latino respondents reported least time in community activities. Using these routes for contacting ethnic groups will have varying effects. Based on the results, church community contacts might be most effective for reaching African Americans.

Media Used to Obtain Information of Outdoor Recreational Opportunities

The consumption findings discussed to this point reflect differences in general media usage. In addition to this information, the survey also required respondents to indicate sources they consulted specifically when attempting to obtain information about outdoor recreational opportunities. As in the more general analysis, African American respondents were significantly more likely than the other groups to use TV as an information source, whereas Asian respondents were the least likely of the ethnic groups to use television as an information source. And, consistent with the earlier results, Latinos were significantly more likely to make use of the radio when searching for information on outdoor recreational opportunities.

Whites were more likely to use newspapers and magazines for information, whereas among the four ethnic groupings, these sources were least favored among Latinos. Billboards, while not highly popular, were more favored by African American respondents than the other groups, whereas Asian respondents favored computers.

African Americans favored interpersonal methods of information search. For example, relatives, church, and church friends were significant sources of information for African American participants; only Latino respondents were comparable in terms of their dependence on relatives for information. When the various subcategories are combined related to friends and family, this is the single category of information most relied upon across all ethnic groups.

Trust in computers and the internet, and family and friends as most frequently listed among all four groups suggests these two routes of communication may be fruitful for natural resource management agencies to pursue. The trend towards e-government is already strengthening the presentation of information on the internet for public access, though some caution may be warranted in relying solely upon the internet for communicating with diverse publics. Not all groups have equal access to the internet, or equal ease and comfort of use with its features. (For a more detailed discussion of these issues see Winter, *in press* [b]). Trust in family and friends suggests that use of community networks and key contacts in communities, especially communities of color, is an effective alternate route to media releases of information. When media is used, ethnic media should be included where possible to reach diverse publics.

Predicting Forest Use

An intriguing pattern of findings emerged in the analysis of variables that predict forest use. The analysis revealed that time spent on some of the more popular sedentary activities (e.g., watching TV, listening to radio) was not related to Forest visitation. However, reading and participation in general community activities did predict Forest visitation. This pattern suggests that print information, disseminated via community groups, might have an unexpectedly strong effect.

One of the striking findings to emerge from our analyses is the strong association between ethnic identity and National Forest use among Latino respondents. The findings suggest that the more people identify as Latino, the less likely they are to avail themselves of the many opportunities for recreation offered by the National Forests. This result is reinforced by the analysis of primary language usage. If an individual's primary language is Spanish, he or she is significantly less likely to make use of the National Forests.

This result is consistent with the finding that the more time an individual spent outside the United States, the less likely was he or she to use the National Forests. This result is probably associated with the earlier findings on ethnic identity. In our sample, the group most likely to have spent time outside the US was of Hispanic descent.

Conclusions

This study was undertaken to assess ethnic differences in Forest visitation; to determine variations in the popularity of outdoor activities across the ethnic groups; to determine media consumption differences that might have relevance to Forest usage; and to determine possible predictors of Forest usage. The results reported here should prove useful in developing messages targeted to the specific interests and the specific media used by one or another of the groups studied here. The analyses provide useful information for the manager interested in affecting the rates at which people of various ethnicities take advantage of National Forest recreation opportunities, or at least to ensure that people of color receive information about those opportunities through routes that recognize their unique media consumption patterns.

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Appendix A

Respondents' Residential Zip Codes and Cities

Zip/Postal Code	City
90001	Los Angeles
90002	"
90003	"
90004	"
90005	"
90006	"
90007	"
90008	"
90009	"
90011	"
90012	"
90013	"
90014	"
90015	"
90016	"
90017	"
90018	"
90019	"
90020	"
90021	"
90022	"
90023	"
90024	"
90025	"
90026	"
90027	"
90028	"
90029	"
90031	"
90032	"
90033	"
90034	"
90035	"
90036	"
90037	"
90038	"
90039	"
90040	"
90041	"
90042	"
90043	"
90044	"
90045	"
90046	"
90047	"
90048	"
90049	"

90051	Los Angeles
90054	"
90055	"
90056	"
90057	"
90058	"
90059	"
90060	"
90061	"
90062	"
90063	"
90064	"
90065	"
90066	"
90067	"
90068	"
90069	West Hollywood
90076	Los Angeles
90077	"
90086	"
90201	Bell
90210	Beverly Hills
90211	"
90212	"
90220	Compton
90221	"
90222	"
90223	"
90230	Culver City
90232	"
90240	Downey
90241	"
90242	"
90245	El Segundo
90247	Gardena
90248	"
90249	"
90250	Hawthorne
90251	"
90254	Hermosa Beach
90255	Huntington Park
90260	Lawndale
90262	Lynwood
90265	Malibu
90266	Manhattan Beach
90270	Maywood
90272	Pacific Palisades
90274	Palos Verdes Peninsula
90275	Rancho Palos Verdes
90277	Redondo Beach

90278	"
90280	South Gate
90290	Topanga
90291	Venice
90292	Marina Del Rey
90293	Playa Del Rey
90301	Inglewood
90302	"
90303	"
90304	"
90305	"
90401	Santa Monica
90402	"
90403	"
90404	"
90405	"
90406	"
90501	Torrance
90502	"
90503	"
90504	"
90505	"
90601	Whittier
90602	"
90603	"
90604	"
90605	"
90606	"
90638	La Mirada
90640	Montebello
90650	Norwalk
90660	Pico Rivera
90670	Santa Fe Springs
90701	Artesia
90703	Cerritos
90704	Avalon
90706	Bellflower
90710	Harbor City
90712	Lakewood
90713	"
90715	"
90716	Hawaiian Gardens
90717	Lomita
90723	Paramount
90731	San Pedro
90732	"
90744	Wilmington
90745	Carson
90746	"
90748	Wilmington

90755	Signal Hill
90801	Long Beach
90802	"
90803	"
90804	"
90805	"
90806	"
90807	"
90808	"
90810	"
90813	"
90814	"
90815	"
91001	Altadena
91006	Arcadia
91007	"
91010	Duarte
91011	La Canada Flintridge
91016	Monrovia
91020	Montrose
91024	Sierra Madre
91030	South Pasadena
91040	Sunland
91042	Tujunga
91066	Arcadia
91077	"
91101	Pasadena
91102	"
91103	"
91104	"
91105	"
91106	"
91107	"
91108	San Marino
91115	Pasadena
91201	Glendale
91202	"
91203	"
91204	"
91205	"
91206	"
91207	"
91208	"
91214	La Cresenta
91301	Agoura Hills
91302	Calabasas
91303	Canoga Park
91304	"
91306	Winnetka
91307	West Hills

91310	Castaic
91311	Chatsworth
91316	Encino
91321	Newhall
91324	Northridge
91325	"
91326	"
91331	Pacoima
91335	Reseda
91337	"
91340	San Fernando
91342	Sylmar
91343	North Hills
91344	Granada Hills
91345	Mission Hills
91346	"
91350	Santa Clarita
91351	Canyon Country
91352	Sun Valley
91353	"
91354	Valencia
91355	"
91356	Tarzana
91364	Woodland Hills
91367	"
91380	Santa Clarita
91381	Stevenson Ranch
91384	Castaic
91387	Canyon Country
91390	Santa Clarita
91401	Van Nuys
91402	Panorama City
91403	Sherman Oaks
91405	Van Nuys
91406	"
91411	"
91412	Panorama City
91413	Sherman Oaks
91423	"
91436	Encino
91501	Burbank
91502	"
91504	Burbank
91505	"
91506	"
91601	North Hollywood
91602	"
91604	Studio City
91605	North Hollywood
91606	"

91607	Valley Village
91702	Azusa
91706	Baldwin Park
91711	Claremont
91715	City of Industry
91722	Covina
91723	"
91724	"
91731	El Monte
91732	"
91733	South El Monte
91734	El Monte
91740	Glendora
91741	"
91744	La Puente
91745	Hacienda Heights
91746	La Puente
91748	Rowland Heights
91750	La Verne
91754	Monterey Park
91755	"
91765	Diamond Bar
91766	Pomona
91767	"
91768	"
91770	Rosemead
91773	San Dimas
91775	San Gabriel
91776	"
91778	"
91780	Temple City
91788	Walnut
91789	"
91790	West Covina
91791	"
91792	"
91793	"
91801	Alhambra
91802	"
91803	"
93243	Lebec
93510	Acton
93532	Lake Hughes
93534	Lancaster
93535	"
93536	"
93543	Littlerock
93544	Llano
93550	Palmdale
93551	"

93552	"
93553	Pearblossom
93591	Palmdale

Appendix B

Interview Protocol

INSTRUCTIONS TO PHONE INTERVIEWER: If it appears that the respondent has difficulty with understanding English, ask the respondent if he or she would feel more comfortable continuing in a different language. Record the language they would prefer, and either (a) continue the interview in their preferred language if you are bilingual, or (b) thank them and file for call-back.

Forest Survey

Introduction: Hello, I'm calling from Claremont Graduate University. I promise I'm not trying to sell you anything. You were randomly selected from people living in LA County, and I'd just like you to answer a few questions for a study we're conducting on LA County communities.

Would you like to participate?

1) We are interested in surveying individuals of voting age. Are you over 18 years of age?
    a. If younger than 18, request for an adult of the household.
2) We are interested in studying possible ethnic differences that exist in LA County, would you mind telling me your ethnicity, please?
    a. [If refuse to give ethnic group, thank them and stop]
    b. [If multiple ethnic groups, if at least partially from a target group including African American, Latino, Asian, or White, continue. If not at least partially from a target group, thank them and stop]
    c. [If multiple ethnic groups]: Is there one ethnic group with which you feel you identify the most?
3) About how many hours a week do you watch television?
4) What are the three channels you watch most often?
5) About how many hours a week do you listen to the radio?
6) What are the three stations you listen to most often?
7) About how many hours a week do you spend reading magazines and newspapers?
8) What are the three newspapers and magazines you read most often?
9) Approximately how many hours a week do you participate in community activities or with community organizations?
10) What are the three community activities or community organizations you participate in most?
11) Some people consider religious services a type of community activity. Do you regularly attend religious services?
    a. [If yes] About how many hours a week do you participate in activities with a religious organization?
    b. May I ask where you attend religious services? [request specific name and location]
12) Where do you usually you get information about outdoor recreational opportunities including national forests and parks, for example the Angeles National Forest?
13) Are there other places you get information about outdoor recreational opportunities?

14) Now I'm going to name some common sources of information. I'd like you to tell me how frequently you use these sources to get information about outdoor recreational opportunities.

For example, how frequently do you get information about outdoor recreational opportunities from Television? [read foils]

0	1	2	3
Never	Sometimes	Frequently	Very Frequently

   a. Television
   b. Radio
   c. Newspapers
   d. Magazines
   e. Billboards
   f. Health Care Providers
   g. Pamphlets
   h. Books
   i. Computers
   j. Relatives
   k. Church
   l. Church friends
   m. Neighbors
   n. Work
   o. Other friends
   p. Community Organization
   q. Are there any other sources from which you get information about outdoor recreational opportunities?

15) If you wanted to find out more information about outdoor recreational opportunities, what source would you trust the most?

16) What are the three types of outdoor activities you participate in most often?

17) In the past 12 months, about how many times did you travel more than 30 miles for outdoor activities?

18) Have you ever visited the National Forests?
   a. [If no] What's the main reason you haven't? – Open ended question
   b. [If no, now go to # 19]
   c. [If yes] When was the last time you visited a National Forest?
      i. Where did you visit?
   d. In the last 12 months, approximately how many times did you visit the National Forest?
   e. What are the three most common activities you do while at the National Forest?

19) Is there anything that keeps you from visiting the National Forests more often?

20) Here are some activities you might do some place other than the National Forests. In the last few years, have you ever gone…
    a. Camping
    b. Hiking
    c. Fishing
    d. Picnicking
    e. Biking
    f. Water Sports
    g. Snow Sports

21) In what year were you born?
    a. How long have you lived in the United States?
    b. [If only part of their life] What country were you born in?
    c. [If only part of their life] What country have you lived in for a majority of your life?

22) What is the primary language spoken in your home?

23) What is the primary language of the reading materials in your home?

24) At the beginning of the survey, you told me your ethnic identity is ____. How well does/do describe you?
    not well, somewhat, pretty well, or perfectly

Thank you. That's all of our questions. Once again, if any questions or concerns have come up over the course of this survey, you can feel free to contact Dr. William Crano at [redacted] or Claremont Graduate University's Office of Sponsored Research at [redacted]. Thank you.

Appendix C

Radio Stations Listened to by Ethnic/Racial Group and Program Type

Radio Stations Among Latinos

Total Responses for Latinos: 304

Type		*Total*	*% of Total*		
Adult Contemporary		16	.0526		
104.3	KBIG	KBIG 104		AC	6
103.5	KOST			Adult Contemporary	4
98.7	KYSR	Star 98.7		Modern AC	4
96.9	KWAV			AC	1
100.9	KRAJ			AC	1
Rock		32	.1053		
106.7	KROQ			Modern Rock	14
96.7	KCAL	K-Cal		Rock	7
95.5	KLOS			Classic Rock	4
93.1	KCBS	The Arrow		Classic Rock	3
101.5	KGB			Classic Rock	2
101.7	KSPN			Lite Rock	2
R & B		46	.1513		
105.9	KPWR	Power 106		R & B	27
100.3	The Beat			R & B	15
92.3	KHHT			Urban Contemp.	3
102.3	KJLH			R & B	1
News/Talk		16	.0526		
640	KFI			Talk	5
1070	KNX			News	3
980	KFWB			News	3
790	KABC			News/Talk	2
570	KLAC			Talk	1
560	KFSO	Hot Talk 560		Talk	1
107.3	KIXW			News/Talk	1
Internet		1	<.001		
Live365.com				internet	1

Ethnic		115	.3783		
101.9	KSCA	La Nueva		Spanish	34
107.5	KLVE	K-Love		Spanish	26
97.9		La Raza		Mexican	19
103.5	KRAY	La Buena		Mexican	8
97.5	KSSE			Spanish	8
105.5	KBUE			Spanish	6
1580	KBLA			Spanish	2
103.9	KRCD			Spanish	2
98.3	KRTO/KRCV			Spanish	2
1390	KLTX			Spanish Religious	2
107.1	KLYY	Viva 107.1		Spanish Top 40	2
670	KIRN			Arabic	1
1330	KWKW			Spanish	1
930	KHJ			Spanish	1
99.1	KZOL	Estereo Sol		Mexican	1
Oldies		13	.0428		
101.1	KRTH	K-Earth		Oldies	12
100.1	KQOD	Mega 100		Oldies	1
Religious		6	.0197		
95.9	KFSH	The Fish		Christian Contemp.	3
1240	KKLA			Religious	1
93.5	KFSG			Religious	1
107.9	KWVE			Religious	1
Sports		2	<.001		
1150	KXTA	Fox Sports		Sports	1
1110	KSPN			Sports	1
Alternative		1	<.001		
88.9	KXLU			Alternative	1
Top 40		23	.0757		
102.7	KIIS			Top 40	19
99.1	KGGI			Top 40	4
Jazz		6	.0197		
94.7	KTWV	The Wave		Jazz	4
88.1	KKJZ			Jazz	2

Country		6	.0197		
93.9	KZLA			Country	5
103.1	KTPI			Country	1
NPR		9	.0296		
				NPR	5
89.9	KCRW			NPR	4
Not Classified		4	.0131		
97.7	KPFK			Variety	2
710	KDIS	Radio Disney			1
1090	KTNS			Standards	1

Radio Stations Among African Americans

Total Responses for African Americans: 248

Type		*Total*	*% of Total*		
Adult Contemporary		4	.0161		
103.5	KOST			Adult Contemporary	1
1260	KOIT			Soft AC	1
98.7	KYSR	Star 98.7		Modern AC	1
191.3	KATY			AC	1
Rock		2	<.001		
101.5	KGB			Classic Rock	1
93.1	KCBS	The Arrow		Classic Rock	1
R & B		127	.5121		
102.3	KJLH			R & B	40
100.3		The Beat		R & B	35
92.3	KHHT			Urban Contemp.	28
105.9	KPWR	Power 106		R & B	24
News/Talk		34	.1371		
1070	KNX			News	11
980	KFWB			News	7
640	KFI			Talk	5
790	KABC			News/Talk	4

97.1	KLSX	97.1 Talk	Talk	3
570	KLAC		Talk	1
89.3	KPCC	Pasadena City Coll	News/Talk	1
870	KRLA		News/Talk	1
560	KFSO	Hot Talk 560	Talk	1
Ethnic		1	<.001	
103.9	KRCD		Spanish	1
Oldies		1	<.001	
101.1	KRTH	K-Earth	Oldies	1
Religious		11	.0443	
99.5	KKLA		Religious	6
107.9	KWVE		Religious	2
1280	KFRN		Family Religious	1
95.9	KFSH	The Fish	Christian Contemp.	1
89.7	KSGN		Religious	1
Sports		2	<.001	
1150	KXTA	Fox Sports	Sports	2
Top 40		11	.0443	
102.7	KIIS		Top 40	6
99.1	KGGI		Top 40	5
Jazz		36	.1452	
94.7	KTWV	The Wave	Jazz	30
88.1	KKJZ		Jazz	6
Country		2	<.001	
103.1	KTPI		Country	2
NPR		4	.0161	
89.9	KCRW		NPR	2
			NPR	2

Not Classified	5	.0202

710	KDIS	Radio Disney		3
97.7	KPFK		Variety	2

Radio Stations Among Asians

Total Responses for Asians: 227

Type	*Total*	*% of Total*
Adult Contemporary	34	.1498

103.5	KOST		Adult Contemporary	18
104.3	KBIG	KBIG 104	AC	8
98.7	KYSR	Star 98.7	Modern AC	8

Rock	24	.1057

106.7	KROQ		Modern Rock	14
93.1	KCBS	The Arrow	Classic Rock	9
103.1	KEZN		Soft Rock	1

R & B	26	.1145

100.3		The Beat	R & B	11
105.9	KPWR	Power 106	R & B	10
92.3	KHHT		Urban Contemp.	4
102.3	KJLH		R & B	1

News/Talk	45	.1982

1070	KNX		News	10
980	KFWB		News	10
640	KFI		Talk	7
97.1	KLSX	97.1 talk	Talk	7
790	KABC		News/Talk	4
570	KLAC		Talk	4
89.3	KPCC	Pasadena City Coll	News/Talk	3

Internet	1	<.001

	Live365.com		internet	1

Ethnic		16	.0705		
1300	KAZN			Chinese	7
107.1	KLYY	Viva 107.1		Spanish Top 40	2
1230	KYPA			Asian	2
1300	KAZN			Chinese	1
96.3	KXOL	El Sol		Spanish	1
97.5	KSSE			Spanish	1
98.3	KRTO/KRCV			Spanish	1
1040	KURS			Spanish	1
Oldies		5	.0220		
101.1	KRTH	K-Earth		Oldies	4
104.7	KDES			Oldies	1
Religious		8	.0352		
	KKLA			Religious	7
107.9	KWVE			Religious	1
Sports		1	<.001		
1430	KFIG			Sports	1
Alternative		1	<.001		
88.9	KXLU			Alternative	1
Top 40		29	.1277		
102.7	KIIS			Top 40	28
99.1	KGGI			Top 40	1
Jazz		8	.0352		
94.7	KTWV	The Wave		Jazz	7
89.1	KUOR			Jazz	1
Classical		11	.0485		
105.1	KMZT	K-Mozart		Classical	7
91.5	KUSC			Classical	4

Country	7	.031

93.9	KZLA		Country	4
103.1	KTPI		Country	2
93.7	KSKS		Country	1

NPR	9	.0396

89.9	KCRW		NPR	5
			NPR	4

Not Classified

1600	KUBA		Adult Standards	3
710	KDIS	Radio Disney		2

Radio Stations Among Whites

Total for Whites: 279

Type	*Total*	*% of Total*
Adult Contemporary	39	.1398

98.7	KYSR	Star 98.7	Modern AC	21
103.5	KOST		Adult Contemporary	8
104.3	KBIG	KBIG 104	AC	7
1260	KOIT		Soft AC	1
106.3	KGMX	K-Mix 96	AC	1
98.5	KWXY		Easy Listening	1

Rock	38	.1362

106.7	KROQ		Modern Rock	14
93.1	KCBS	The Arrow	Classic Rock	11
95.5	KLOS		Classic Rock	10
96.7	KCAL	K-Cal	Rock	2
101.7	KSPN		Lite Rock	1

R & B	9	.0322

105.9	KPWR	Power 106	R & B	5
92.3	KHHT		Urban Contemp.	3
100.3		The Beat	R & B	1

News/Talk		72	.258	
640	KFI		Talk	22
790	KABC		News/Talk	15
1070	KNX		News	8
980	KFWB		News	6
570	KLAC		Talk	6
97.1	KLSX	97.1	Talk	5
89.3	KPCC		News/Talk	5
870	KRLA		News/talk	5
Ethnic		1	<.001	
94.5	KBUA	K-Buena	Spanish	1
Oldies		16	.0573	
101.1	KRTH	K-Earth	Oldies	14
99.9	KOLA		Oldies	1
100.1	KQOD	Mega 100	Oldies	1
Religious		11	.0394	
95.9	KFSH	The Fish	Christian Contemp.	3
93.5	KFSG		Religious	3
89.7	KSGN		Religious	1
	KKLA		Religious	1
1340	KAVC		Religious	1
107.9	KWVE		Religious	1
1280	KFRN		Religious	1
Sports		2	<.001	
1540	KMPC		Sports	1
1230	KGEO	ESPN	Sports	1
Alternative		1	<.001	
88.9	KXLU		Alternative	1
Top 40		17	.061	
102.7	KIIS		Top 40	16
99.1	KGGI		Top 40	1

Jazz		12	.043	
94.7	KTWV	The Wave	Jazz	5
88.1	KKJZ		Jazz	5
102.3	KJJZ		Jazz	2
Country		21	.075	
93.9	KZLA		Country	12
95.1	KFRG	K-Frog	Country	3
103.1	KTPI		Country	3
104.9	KLOA		Country	2
100.7	KHAY		Country	1
Classical		13	.0466	
91.5	KUSC		Classical	6
105.1	KMZT	K-Mozart	Classical	6
88.5	KSCN		Classical	1
Sports		1	<.001	
1150	KXTA	Fox Sports	Sports	1
NPR		17	.061	
			NPR	9
89.9	KCRW		NPR	8
Not Classified				
97.7	KPFK		Variety	4
	XM		Satellite	2
88.7	KSPC		Pomona Coll	1

Appendix D

Newspapers Read by Ethnic/Racial Group[7] in Order of Frequency

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[7] In order of frequency within each group.

Group	Name of Paper	Number	%
Latinos (119 responses)			
	LA Times	59	49.6
	La Opinion	36	30.3
	LA Daily News	7	5.9
	The New York Times	4	3.4
	Daily Breeze	3	2.5
	San Gabriel Valley Tribune	2	1.7
	Antelope Valley Press	1	< 1%
	Los Angeles Wave	1	“
	Pennysaver	1	“
	Press-Telegram (Long Beach)	1	“
	Reuters.com	1	“
	The Desert Sun	1	“
	The Los Angeles Downtown News	1	“
	Whittier Daily News	1	“
African Americans (149 responses)			
	LA Times	102	68.5
	Daily Breeze	10	6.7
	Press-Telegram (Long Beach)	9	6.0
	The Sentinal	7	4.7
	The New York Times	5	3.3
	LA Daily News	3	2.0
	Wall Street Journal	3	2.0
	Pasadena Star-News	2	1.3
	Los Angeles Wave	1	< 1%
	Redlands Daily Facts	1	“
	San Bernardino County Sun	1	“
	The (San Francisco) Examiner	1	“
	The Los Angeles Sun	1	“
	The Press Enterprise	1	“
	The Sun	1	“
	USA Today	1	“

Asians (131 responses)

LA Times	99	75.6
Press Telegram (Long Beach)	5	3.8
Wall Street Journal	5	3.8
LA Daily News	4	3.1
Pasadena Star-News	3	2.3
The New York Times	3	2.3
Daily Breeze	2	1.5
San Gabriel Valley Tribune	2	1.5
The Korea Times	2	1.5
USA Today	2	1.5
Chinese Daily	1	< 1%
Investor’s Business Daily	1	“
The Daily Report	1	“
The Orange County Register	1	“

Whites (165 responses)

LA Times	97	58.8
LA Daily News	20	12.1
Antelope Valley News	11	6.7
Press-Telegram (Long Beach)	8	4.8
The Orange County Register	5	3.0
Daily Breeze	3	1.8
Wall Street Journal	3	1.8
National Inquirer	2	1.2
Pasadena Star-News	2	1.2
San Gabriel Valley Tribune	2	1.2
The Inquirer	2	1.2
USA Today	2	1.2
Whittier Daily News	2	1.2
Arcata Eye	1	< 1%
Glendale News-Press	1	“
Grunion Gazette (Long Beach)	1	“
La Opinion	1	“
New York Times	1	“
The Signal (Santa Clarita	1	“

Appendix E

Magazines Read by Ethnic/Racial Group[8] in Order of Frequency

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[8] In order of frequency within each group.

Group	Name of Paper	Number	%
Latinos (117 responses)			
	People	10	8.5
	Cosmopolitan	9	7.7
	Tele Novela/TV y Novelas	7	6.0
	Vanidades	5	4.3
	Good Housekeeping	4	3.4
	Cosmo en Espanol	3	2.6
	Latina	3	2.6
	Maxim	3	2.6
	Sports Illustrated	3	2.6
	Time	3	2.6
	YM/ Young and Modern	3	2.6
	Entertainment (Weekly)	2	1.7
	Rolling Stone	2	1.7
	Glamour	2	1.7
	Mi Gente	2	1.7
	Mira!	2	1.7
	National Geographic	2	1.7
	Reader's Digest	2	1.7
	Prevention	2	1.7
	US/US Weekly	2	1.7
	Vogue	2	1.7
	AARP: The Magazine	1	*
	American Heritage	1	*
	Architectural Digest	1	*
	Arthur Frommer's Budget Travel Mag.	1	*
	Better Homes and Gardens	1	*
	Bon Appetit	1	*
	Car and Driver	1	*
	Cargo	1	*
	D Magazine	1	*
	Discover	1	*
	Disney	1	*
	FHM	1	*
	First (for women)	1	*
	Interior Design	1	*
	J-14	1	*
	Ladies' Home Journal	1	*
	LA Weekly	1	*
	Lowrider	1	*
	MOJO	1	*
	Motor Trend	1	*
	Nature	1	*
	Newsweek	1	*
	O, The Oprah Magazine	1	*

Parenting	1	*
Parents	1	*
Popular Mechanics	1	*
Popular Photography & Imaging	1	*
Scientific American	1	*
Selecciones	1	*
Self	1	*
Seventeen	1	*
SHAPE	1	*
Star	1	*
Stuff Magazine	1	*
Sunset	1	*
Teen	1	*
Teen Vogue	1	*
The Advocate	1	*
The Source	1	*
US News & World Report	1	*
W Magazine	1	*
Wine Spectator	1	*
Wired	1	*
Women's Health & Fitness	1	*

African Americans (159 responses)

Ebony	25	15.7
Essence	17	10.7
Jet	16	10.1
Newsweek	8	5.0
Sports Illustrated	6	3.8
Time	6	3.8
National Geographic	5	3.1
O, The Oprah Magazine	5	3.1
AARP: The Magazine	4	2.5
FHM	4	2.5
Black Enterprise	3	1.9
LA Weekly	3	1.9
Stuff Magazine	3	1.9
Vibe	3	1.9
Cosmopolitan/Cosmo	2	1.3
Glamour	2	1.3
Men's Health	2	1.3
Muscle & Fitness	2	1.3
Sunset	2	1.3
Teen	2	1.3
The Source	2	1.3
ACC Magazine	1	*
Architectural Digest	1	*
Black Business Journal	1	*

Business Week	1	*
Charisma (& Christian Life)	1	*
Child	1	*
Church	1	*
Consumer Reports	1	*
Daily Word	1	*
Drag News	1	*
Esquire	1	*
ESSIC	1	*
Fitness	1	*
Golf Digest	1	*
Hot Rod	1	*
Import Tuner	1	*
King	1	*
Ladies' Home Journal	1	*
Maxim	1	*
Money	1	*
Odyssey	1	*
Parenting	1	*
PC Today	1	*
People	1	*
Prevention	1	*
Psychology Today	1	*
Reader's Digest	1	*
Redbook	1	*
RN Magazine	1	*
Sister 2 Sister	1	*
Sporting News	1	*
Tennis	1	*
Travel & Leisure	1	*
TV Guide	1	*
Unity	1	*
Woman's Day	1	*
YM/Young and Modern	1	*

Asians (120 responses)

Newsweek	9	7.5
Time	8	6.7
O, The Oprah Magazine	6	5.0
People	4	3.3
Reader's Digest	4	3.3
Cosmopolitan/Cosmo	3	2.5
National Geographic	3	2.5
Seventeen	3	2.5
The New Yorker/New Yorker	3	2.5
Business Week	2	1.7
In Style	2	1.7

Maxim	2	1.7
Parenting	2	1.7
Parents	2	1.7
Science	2	1.7
Self	2	1.7
The Atlantic Monthly	2	1.7
Western Outdoors	2	1.7
Westways	2	1.7
4 x 4 Magazine	1	*
AARP: The Magazine	1	*
American Baby	1	*
Auto Week	1	*
Computer	1	*
Conde Nast Traveler	1	*
Consumer Reports	1	*
Educational Leadership	1	*
Elle	1	*
Film Comment	1	*
Fitness	1	*
Fortune	1	*
Globe	1	*
Golf Digest	1	*
Gourmet	1	*
Guideposts Magazine	1	*
Health	1	*
Harper's Weekly Review	1	*
In Touch/Touch Weekly	1	*
Java Pro	1	*
JavaWorld	1	*
Keyboard	1	*
Ladies' Home Journal	1	*
Latina	1	*
Lucky	1	*
Marie Claire	1	*
Mother Earth News Magazine	1	*
Motorcyclist	1	*
Motor Trend	1	*
New Type	1	*
Off-Road	1	*
PC Magazine	1	*
Popular Science	1	*
Print	1	*
Runner's World	1	*
Scientific American	1	*
SHAPE	1	*
Snowboarding	1	*
Sports Illustrated	1	*
Star	1	*

Sunset	1	*
Super Street	1	*
Surfing	1	*
Style	1	*
Taste of Home's (Quick Cooking)	1	*
The Economist	1	*
The Source	1	*
TV Guide	1	*
URB	1	*
US/US Weekly	1	*
(Daily) Variety	1	*
Vice	1	*
Vogue	1	*
Wired	1	*
YM/Young and Modern	1	*

Whites (129 responses)

Newsweek	11	8.5
Cosmopolitan/Cosmo	8	6.2
Reader's Digest	8	6.2
People	7	5.4
National Geographic	5	3.9
Time	5	3.9
Good Housekeeping	4	3.1
Maxim	4	3.1
The New Yorker/New Yorker	4	3.1
Family Circle	3	2.3
National Review	3	2.3
US/US Weekly	3	2.3
Better Homes & Gardens	2	1.5
Business Week	2	1.5
Guideposts Magazine	2	1.5
LA Weekly	2	1.5
Prevention	2	1.5
Redbook	2	1.5
Sports Illustrated	2	1.5
Stuff Magazine	2	1.5
US News & World Report	2	1.5
5.0 Mustang	1	*
Architectural Digest	1	*
Bon Appetit	1	*
Car & Driver	1	*
Charisma (& Christian Life)	1	*
Christianity Today	1	*
Computerworld	1	*
Consumer Reports	1	*
Country	1	*

Country Living	1	*
Ebony	1	*
Entertainment (Weekly)	1	*
Esquire	1	*
ESPN	1	*
Glass Digest	1	*
Gourmet	1	*
Guns & Ammo	1	*
Harvard Magazine	1	*
Heavy Metal	1	*
Hot Rod	1	*
InStyle	1	*
In Touch/In Touch Weekly	1	*
Ladies' Home Journal	1	*
Martha Stewart Living	1	*
Men's Health	1	*
MOTOcross	1	*
Natural History	1	*
Parents	1	*
Playboy	1	*
Popular Photography & Imaging	1	*
(Taste of Home's) Quick Cooking	1	*
Remedy	1	*
Road & Track	1	*
Saturday Evening Post	1	*
Scientific American	1	*
Seahorse	1	*
SHAPE	1	*
Smart Computing	1	*
Star	1	*
Theatre Journal	1	*
The Pastel Journal	1	*
Victoria	1	*
Vogue	1	*
Wallpaper	1	*
Woman's Day	1	*
Yoga Journal	1	*

Appendix F

Reasons for Not Visiting the National Forests More Often by Ethnic Group

Reason	Latinos	African Americans	Asians	Whites	% of total
Age	3	4	1	5	3.8
Health or physical limitation	5	14	4	10	9.5
Lack of time	41	16	23	25	30.3
Not interested	8	26	8	14	16.2
Crowds	0	1	0	3	1.2
Too far	1	4	6	3	4.0
Transportation	10	10	2	3	7.2
Lack of information	5	4	4	1	4.0
Fear of wild animals	1	2	1	2	1.7
Lack of money	4	3	0	6	3.8
Family responsibilities	5	3	0	1	2.6
No one to go with	1	1	3	2	2.0
Work	5	6	5	3	5.5
Fire related	1	2	0	1	1.2
Crime	1	1	0	0	.6
School	1	1	2	1	1.4
Other fears	0	1	1	0	0
Other	8	1	4	2	4.3
# of responses	100	100	64	82	100